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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,599	03/25/2004	Huayan Amy Wang	SBL01611	7239
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MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			EXAMINER DAVIS, ZACHARY A	
			ART UNIT 2437	PAPER NUMBER
			NOTIFICATION DATE 04/22/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com

# Office Action Summary

**Application No.**

10/809,599

**Applicant(s)**

WANG, HUAYAN AMY

**Examiner**

Zachary A. Davis

**Art Unit**

2437

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 4-17, 19-23 and 25-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-17, 19-23 and 25-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A response was received on 21 January 2009. By this response, no claims have been amended, added, or canceled. Claims 1, 2, 4-17, 19-23, and 25-35 are currently pending in the present application.

### ***Response to Arguments***

2. Applicant's arguments filed 21 January 2009 have been fully considered but they are not persuasive.

Regarding the rejection of Claims 1, 2, 4-17, 19-23, and 25-35 under 35 U.S.C. 103(a) as unpatentable over Macaulay, US Patent Application Publication 2003/0135762, in view of Hrastar, US Patent 7042852, and with specific reference to independent Claims 1 and 19, Applicant again argues that neither Macaulay nor Hrastar discloses the state table as recited in the independent claims (pages 3-5 of the present response). More specifically, Applicant maintains "that the state data store of Hrastar does not disclose the MAC address parameter nor the further unrelated parameter" and that the state "only refers to 'whether or not the device has been seen before and whether or not the station is unauthenticated and unassociated, authenticated, authenticated and associated or unknown state information associated with the wireless computer network'" (page 4 of the present response, citing Hrastar, column 29, lines 12-17). Applicant further asserts that although "the Examiner is obviating [sic] the MAC

address parameter and the further unrelated parameter by using the station database", Claim 1 instead "recites that the *state table* (not a further table such as a station database) includes state information" including the MAC address and unrelated parameters (page 4 of the present response, emphasis Applicant's). However, the Examiner submits that the station database as disclosed by Hrastar, by itself (i.e. not in conjunction with the disclosed state data store), meets the claimed state table because it includes state information that includes all three of the MAC address parameter (see Hrastar, column 29, lines 5-11, in particular lines 7-8, where the station database includes a device address, which is a MAC address, see column 26, lines 41-46, for example), the authentication status parameter (Hrastar, column 29, lines 5-11, in particular line 8, where the station database includes "communications state" which corresponds to the claimed authentication status, noting also the description of what is encompassed by the "state" at column 29, lines 12-17, as previously cited and noted above by Applicant), and the further unrelated parameter (Hrastar, column 29, lines 5-11, where the station database includes other parameters such as timestamps and byte counts). The Examiner thus submits that the station database itself corresponds to the claimed state table, as detailed above.

Therefore, for the reasons detailed above, the Examiner maintains the rejection as set forth below.

***Specification***

3. The objection to the specification for failure to provide antecedent basis for the claimed subject matter is withdrawn in light of Applicant's remarks more specifically pointing out antecedent basis support for the claimed subject matter is to be found (see pages 2-3 of the present response).

***Claim Rejections - 35 USC § 112***

4. The rejection of Claims 1, 2, 4-17, 19-23, and 25-35 under 35 U.S.C. 112, first paragraph, for failure to comply with the written description requirement is withdrawn in light of Applicant's remarks explicitly pointing out where written description support for the claimed subject matter is to be found in the present specification (see pages 2-3 of the present response).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4-17, 19-23, and 25-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Macaulay, US Patent Application Publication 2003/0135762, in view of Hrastar, US Patent 7042852.

In reference to Claim 1, Macaulay discloses a method for detecting unauthorized attempts to access a wireless data communication system, where the method includes forwarding one or more packets received by an access point to a computer that compares the format of the packets to a format specified by a protocol (see paragraphs 0045-0046 and 0095-0107; note also paragraphs 0032-0035 and 0042 where the wireless network is monitored), and signaling an alert if the packets deviate from the protocol specified format (see paragraphs 0049-0050). However, Macaulay does not explicitly disclose maintaining a state table storing state information for the mobile units, where the state information is also used to signal an alert.

Hrastar discloses a method in which a state table storing state information for mobile units is stored (column 28, line 64-column 29, line 4, where the data store includes a state data store and a station database; column 29, lines 5-17), where the state information includes at least a MAC address parameter, an authentication status parameter, and a further parameter unrelated to the MAC address parameter and authentication status parameter (column 29, lines 5-17, where the station database includes information including a device address, communications state, and other parameters, where the address is a MAC address, column 26, lines 41-46, the "state" corresponds to the claimed authentication status, and the timestamps and byte counts, for example, correspond to the claimed unrelated parameters), and an alert is signaled

if packets deviate from the stored state information (column 30, lines 35-43). Therefore, it would have been obvious to one of ordinary skill in the art to modify the method of Macaulay to include state information, in order to enhance network security (Hrstar, column 5, lines 21-22).

In reference to Claim 2, Macaulay and Hrstar further disclose a header message portion and comparing the format of the header portion to the protocol specified format (see Macaulay, the table following paragraph 0094).

In reference to Claim 4, Macaulay and Hrstar further disclose comparing format of a frame control field (see Macaulay, the table following paragraph 0094).

In reference to Claims 5 and 6, Macaulay and Hrstar further disclose Management and Control frames (see Macaulay, the table following paragraph 0094; see also paragraph 0099).

In reference to Claims 7 and 8, Macaulay and Hrstar further disclose comparing a WEP flag value (see Macaulay, paragraph 0104).

In reference to Claim 9, Macaulay and Hrstar further disclose a protocol version (see, for example, Macaulay, paragraph 0083).

In reference to Claims 10 and 11, Macaulay and Hrstar further disclose source MAC addresses that are multicast and broadcast addresses (see Macaulay, paragraphs 0124, 0127).

In reference to Claims 12-15 and 17, Macaulay and Hrstar further disclose monitoring for a possible denial of service attack (Macaulay, paragraph 0106) and that

the packets may contain unsupported values and lengths (Macaulay, paragraph 0107, for example).

In reference to Claim 16, Macaulay and Hrastar further disclose detecting a spoofed MAC address (Macaulay, paragraphs 0095, 0101).

In reference to Claim 19, Macaulay discloses a method for detecting unauthorized attempts to access a wireless data communication system, where the method includes forwarding one or more packets received by a mobile unit to a computer that compares the format of the packets to a format specified by a protocol (see paragraphs 0045-0046 and 0095-0107; note also paragraphs 0032-0035 and 0042 where the wireless network is monitored), and signaling an alert if the packets deviate from the protocol specified format (see paragraphs 0049-0050). However, Macaulay does not explicitly disclose maintaining a state table storing state information for the mobile units, where the state information is also used to signal an alert.

Hrastar discloses a method in which a state table storing state information for mobile units is stored (column 28, line 64-column 29, line 4, where the data store includes a state data store and a station database; column 29, lines 12-17), where the state information includes at least a MAC address parameter, an authentication status parameter, and a further parameter unrelated to the MAC address parameter and authentication status parameter (column 29, lines 5-17, where the station database includes information including a device address, communications state, and other parameters, where the address is a MAC address, column 26, lines 41-46, the "state"



corresponds to the claimed authentication status, and the timestamps and byte counts, for example, correspond to the claimed unrelated parameters), and an alert is signaled if packets deviate from the stored state information (column 30, lines 35-43). Therefore, it would have been obvious to one of ordinary skill in the art to modify the method of Macaulay to include state information, in order to enhance network security (Hrastar, column 5, lines 21-22).

Claims 20-23 and 25-35 recite limitations corresponding to and similar to those recited in Claims 2 and 4-17, and are rejected by a similar rationale.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571)272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ZAD/  
Examiner, Art Unit 2437

/Emmanuel L. Moise/  
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